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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/760,238	01/21/2004	Kia Silverbrook	MPA20US	2189
24011	7590	05/23/2006	EXAMINER	
SILVERBROOK RESEARCH PTY LTD 393 DARLING STREET BALMAIN, NSW 2041 AUSTRALIA			GOLDBERG, BRIAN J	
			ART UNIT	PAPER NUMBER
			2861	

DATE MAILED: 05/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/760,238	SILVERBROOK ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Brian Goldberg	2861	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 February 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 February 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Drawings***

1. The drawings were received on 2/10/06. These drawings are acceptable.

### ***Terminal Disclaimer***

2. The terminal disclaimer filed on 2/10/06 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of application number 10/760,200 has been reviewed and is accepted. The terminal disclaimer has been recorded.

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Silverbrook et al. (US 6439908).
3. Regarding claim 1, Silverbrook et al. disclose "at least one printhead module (10 of Fig 2) comprising at least two printhead integrated circuits (18 of Fig 4), each of which has nozzles formed therein for delivering printing fluid onto the surface of print media (col 3 ln 45-47), a support member (28 of Fig 8) supporting and carrying the printing fluid for the at least two printhead integrated circuits, and an electrical connector (48 of Fig 8) for connecting electrical signals to the at least two printhead integrated circuits; drive electronics incorporating at least one controller which is connected to at

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least one of the at least two printhead integrated circuits via the electrical connector for controlling the printing operation of at least one of the at least two printhead integrated circuits (col 3 ln 48-49 and ln 59-65); and a casing (14 of Fig 3) removably supporting at least one mounting element (lower portion of Fig 8) which mounts the drive electronics and incorporates a clamping arrangement (94 and curved edge of 14 of Fig 2) for removably clamping the at least one printhead module to the casing.” The structure of 94 and the curved edge of 14 can serve as a clamp in that it assists in holding the printhead module 10 in place. Alternatively, one could consider “a casing (28 of Fig 8) in which the at least one printhead module is removably mounted by having a first side thereof slidably received in a longitudinally extending groove (94 of Fig 6) of the casing and a second side thereof clamped to the casing by a clamp mounted to the casing (44 of Fig 6).”

4. Regarding claim 2, Silverbrook et al. disclose “the support member includes longitudinally extending tabs (44 of Fig 11) on the two parallel sides thereof; the casing comprises a support frame (64, 94, lower parts of 76 and 32 of Fig 2) for supporting the at least one mounting element, the support frame comprising a first side wall (94 of Fig 2) having a longitudinally extending recessed groove (92 of Fig 5) and a second side wall (64 of Fig 2) substantially parallel to the first side wall; and the longitudinally extending tab (44 Fig 11) on one side of the support member is received in the longitudinally extending recessed groove (92 of Fig 5) of the support frame and the longitudinally extending tab on the other side of the support member is received on an upper surface of the second side wall (64 of Fig 5) of the support frame (see Fig 5).”

5. Regarding claim 3, Silverbrook et al. disclose “wherein the clamping arrangement comprises recessed portions (92 or 97 of Fig 3) for interlocking with lug members (tips of 44 of Fig 11) of the printhead module.”

6. Regarding claim 4, Silverbrook et al. disclose “wherein the lug members (tips of 44 of Fig 11) are provided along the longitudinally extending tabs (44 of Fig 11) of the support member and are spaced so as to correspond to positions at which the at least two printhead integrated circuits (18 of Fig 8) are provided on the at least one printhead module, and the recessed portions (92 or 97 of Fig 3) engage with the lug members (tips of 44 of Fig 11) on the longitudinally extending tab (44 of Fig 11).”

7. Regarding claim 5, Silverbrook et al. disclose “wherein the clamping arrangement of the at least one mounting element comprises at least one extending arm portion (lower portion of 64 of Fig 2) so as to clamp the longitudinally extending tab (44 of Fig 11) of the support member to the upper surface of the second side wall (64 of Fig 5) of the support frame.”

8. Regarding claim 6, Silverbrook et al. disclose “wherein the at least one extending arm portion includes at least one of the recessed portions (92 of Fig 5) of the clamping arrangement.”

9. Regarding claim 7, Silverbrook et al. disclose “the at least one printhead module (10 of Fig 2) is formed as a unitary arrangement of the at least two printhead integrated circuits (18 of Fig 4), the support member (28 of Fig 8), the electrical connector (48 of Fig 8), and at least two fluid distribution members (26 of Fig 7) each mounting one of the at least two printhead integrated circuits to the support member; and the support

member has at least one longitudinally extending channel (30 of Fig 8) for carrying the printing fluid for the printhead integrated circuits and includes a plurality of apertures (72 of Fig 8) extending through a wall of the support member arranged so as to direct the printing fluid from the at least one channel to associated nozzles in both, or if more than two, all of the printhead integrated circuits by way of respective ones of the fluid distribution members (see Fig 7 and col 3 ln 45-47)."

### ***Response to Arguments***

10. Applicant's arguments filed 2/10/06 have been fully considered but they are not persuasive.

11. Regarding claim 1, the current application contains integrated printhead circuits 51 on tiles 50 that are arranged on top of the fluid channel member 40, which extends the length of the printhead as can be seen in figure 4A. As stated in paragraph [0090] of the present application, "as illustrated in Figs. 1 and 2, sixteen printhead tiles 50 [each with one integrated printhead circuit 51 as seen in figure 5A] are provided in the printhead module 30." In figures 1 and 2, the arrow of 30 is pointing to a single printhead tile/integrated circuit, and the figures also show that there are sixteen printhead tile/integrated circuits comprising the entire length of the printhead.

Therefore, if sixteen printhead tiles are provided in the printhead module as stated, then the module must be considered the entire length of the apparatus shown in figures 1 and 2, with one fluid channel member 40 (or a series of sixteen interconnected fluid channel members) containing sixteen sets of outlet ports 42 as shown in figure 4A, and sixteen printhead tiles/integrated circuits on the upper surface of that one fluid channel

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member (or series of interconnected fluid channel members). Hence, either each printhead module (indicated by the arrow of 30 in figures 1 and 2) has only one printhead tile/integrated circuit, which contradicts the claim, or the printhead module is to be taken to mean the entire length shown in figures 1 and 2 where the module has at least two printhead tiles/integrated circuits and is shown in the figures with sixteen printhead tiles/integrated circuits.

12. A similar analysis can be applied to the cited reference, and the printhead module 10 can be taken to mean the entire length shown in figure 2 to satisfy the claimed printhead module of the instant application.

13. In describing the Memjet chip, Silverbrook discloses that it contains a drive transistor and that sixteen data connections drive the chip (see col 3 ln 48-49 as cited above), which constitutes drive electronics. Also, contrary to the applicant's contention, Silverbrook does not disclose anywhere in the specification that the connector 66 connects to an external controller.

### ***Conclusion***

14. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Goldberg whose telephone number is 571-272-2728. The examiner can normally be reached on Monday through Friday, 9AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vip Patel can be reached on 571-272-2458. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Brian Goldberg *BG*  
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May 17, 2006

*[Signature]*  
Vip Patel  
SUPERVISING EXAMINER  
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